

Hazard and Vulnerability Analysis

INSTRUCTIONS:

Evaluate potential for event and response among the following categories using the hazard specific scale. Assume each event incident occurs at the worst possible time (e.g. during peak patient loads).

Please note specific score criteria on each work sheet to ensure accurate recording.

Issues to consider for **probability** include, but are not limited to:

- 1 Known risk
- 2 Historical data
- 3 Manufacturer/vendor statistics
- 4 Subjective evaluation/best estimate
- 5 Local Emergency Planning Committee input

Issues to consider for **response** include, but are not limited to:

- 1 Time to marshal an on-scene response
- 2 Scope of response capability/staff training
- 3 On site support resources/supplies
- 4 Estimated severity & duration of the incident
- 5 Historical evaluation of response success
- 6 Local Emergency Planning Committee input

Issues to consider for **human impact** include, but are not limited to:

- 1 Potential for staff death or injury
- 2 Potential for patient/visitor death or injury
- 3 Emotional/psychological impact
- 4 Local cultural norms

Issues to consider for **property impact** include, but are not limited to:

- 1 Cost to replace
- 2 Cost to set up temporary replacement
- 3 Cost to repair
- 4 Time to recover

Issues to consider for **business impact** include, but are not limited to:

- 1 Business interruption
- 2 Employees unable to report to work
- 3 Customers unable to reach facility
- 4 Company in violation of contractual agreements
- 5 Company in violation of regulatory standards
- 6 Imposition of fines and penalties or legal costs
- 7 Interruption of critical supplies
- 8 Interruption of product distribution
- 9 Reputation and public image
- 10 Financial impact/burden

EXAMPLES OF NATURAL HAZARDS

Flooding
Tornadoes
Thunderstorms
Lightning
High Winds
Wildfire
Hail Storms
Droughts
Winter Weather Events
Dam Failure
Mudslide/landslide
Ice Storms
Earthquakes
Extreme Temperatures
Caving/subsidence
Forest Health
Infectious Disease

EXAMPLES OF TECHNOLOGICAL HAZARDS

Hazardous Materials Incidents
Energy Emergencies
Arson
Terrorism
Civil Disturbance
Train derailment
Industrial sabotage

Issues to consider for **preparedness** include, but are not limited to:

- 1 Status of current plans
- 2 Frequency of drills
- 3 Training status
- 4 Insurance
- 5 Availability of alternate sources for critical supplies/services

Issues to consider for **internal resources** include, but are not limited to:

- 1 Types of supplies on hand/will they meet need?
- 2 Volume of supplies on hand/will they meet need?
- 3 Staff availability & training
- 4 Coordination with MOB's
- 5 Availability of back-up systems
- 6 Internal resources ability to withstand disasters/survivability

Issues to consider for **external resources** include, but are not limited to:

- 1 Types of agreements with community agencies/drills?
- 2 Coordination with local and state agencies
- 3 Coordination with proximal health care facilities
- 4 Coordination with treatment specific facilities
- 5 City/County EMS services capabilities
- 6 Community volunteers/training
- 7 Vendor Pre-incident response plans/contracts

**HAZARD PRIORITY MATRIX
NATURAL HAZARDS**

HAZARD	PROBABILITY									RISK
	Likelihood this will occur	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	DURATION	WARNING TIME	AFFECTED AREA	PREPARED-NESS	RESPONSE CAPABILITY	
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	Possibility of death or injury 0 = N/A 1 = Low 2 = Moderate 3 = High	Physical losses and damages 0 = N/A 1 = Low 2 = Moderate 3 = High	Interruption of services 0 = N/A 1 = Low 2 = Moderate 3 = High	Event, secondary impacts 0 = N/A 1 = Short 2 = Intermediate 3 = Long	Time to prepare or evacuate 0 = N/A 1 = Long 2 = Intermediate 3 = Short	Size of area affected by hazard 0 = N/A 1 = Localized 2 = Intermediate 3 = Countywide	Preplanning 0 = N/A 1 = High 2 = Moderate 3 = Low or none	Time, effectiveness, resources 0 = N/A 1 = High 2 = Moderate 3 = Low or none	Relative threat* 0 - 100%
<i>Winter Weather</i>	3	2	2	3	2	2	2	2	3	75.0%
<i>Drought</i>	2	1	2	1	2	1	2	3	3	41.7%
<i>Wildfire</i>	3	1	3	2	2	3	1	2	1	62.5%
<i>Tornado</i>	2	3	3	3	2	3	1	2	2	52.8%
<i>Flooding</i>	3	2	3	1	1	3	1	2	3	66.7%
<i>Extreme Temperatures</i>	3	2	1	2	2	3	2	2	1	62.5%
<i>Hail</i>	2	1	2	0	0	3	1	3	3	36.1%
<i>Lightning</i>	3	1	1	2	1	3	1	3	0	50.0%
<i>High Winds</i>	3	1	2	2	1	3	2	3	2	66.7%
<i>Earthquake</i>	1	2	2	2	2	3	3	3	3	27.8%
<i>Fog</i>	2	1	1	0	1	3	3	3	3	41.7%
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AVERAGE SCORE										

**HAZARD PRIORITY MATRIX
TECHNOLOGICAL HAZARDS**

HAZARD	PROBABILITY									
	Likelihood this will occur	HUMAN IMPACT	PROPERTY IMPACT	BUSINESS IMPACT	DURATION	WARNING TIME	AFFECTED AREA	PREPARED-NESS	RESPONSE CAPABILITY	RISK
SCORE	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1 = Low 2 = Moderate 3 = High	0 = N/A 1=Short 2= Intermediate 3=Long	0 =N/A 1=Long 2= Intermediate 3=Short	0 =N/A 1=Localized 2 = Intermediate 3=Countywide	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 = N/A 1 = High 2 = Moderate 3 = Low or none	0 - 100%
<i>Explosives Attack</i>	1	3	1	1	1	3	1	3	3	22.2%
<i>Chemical Attack</i>	1	3	1	1	1	3	1	3	3	22.2%
<i>Communicable Disease</i>	3	3	1	1	1	1	3	3	1	58.3%
<i>Power Outage</i>	3	1	1	3	2	3	2	3	2	70.8%
<i>Water System Failure</i>	2	0	0	3	2	3	2	3	2	41.7%
<i>Structure Fire(if data is avaiable)</i>	3	3	3	1	1	3	1	2	2	66.7%
<i>Multiple Vehicle Highway Accident</i>	3	3	3	1	0	3	1	3	2	66.7%
<i>Fuel Shortage</i>	1	1	1	3	1	1	3	0	0	13.9%
<i>Airplane Crash</i>	1	3	3	0	0	3	1	0	3	18.1%
<i>Hazmat Release/Explosion</i>	3	3	3	3	3	3	2	2	3	91.7%
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AVERAGE SCORE										0.0%